

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

**BOEING COMMERCIAL AIRPLANE
GROUP**

for an exemption from § 25.812 of the Federal
Aviation Regulations

Regulatory Docket No. 28352

PARTIAL GRANT OF EXEMPTION

By letter B-T113-1733 dated October 5, 1995, Mr. K. B. Buchanan, Manager, Certification, Delivery and Fleet Support, B-T113, Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207, petitioned for temporary exemption from the illumination requirements of § 25.812(g)(1) for the escape means required by Exemption No. 5993A at the entry door on the Model 767-300F freighter airplane, to allow the carriage of supernumerary occupants.

Sections of the FAR affected:

Section 25.812(g)(1), Amendment 25-32, requires, in pertinent part, that for the required emergency escape assist means at the entry door, illumination of a certain defined level must be provided on the ground where an evacuee would normally make first contact with the ground.

(Current requirements identical to those above of the 767-300F certification basis may be found in § 25.812(h)(1), Amendment 25-58.)

ANM-96-001-E

The petitioner's supportive information is as follows:

Boeing requests a temporary exemption from the requirements of § 25.812 for the illumination of the ground area where an evacuee would likely contact the ground during an airplane evacuation using an inertia reel descent device at the entry door for Boeing Model 767-300F airplanes. The time extent of the temporary exemption is to be from October 6, 1995, until December 31, 1996, for availability of kits for retrofit compliance.

Granting a temporary exemption will not impede development of an improved emergency lighting system configuration that satisfies § 25.812 with respect to the subject ground area.

Public safety will not be adversely affected, since these airplanes are not approved for the carriage of revenue passengers from the traveling public. The 767-300F airplane will only be occupied by the flight crew and certain persons (not more than 4) who will have received a briefing about evacuation of the airplane in the event of an emergency. The 767-300F does include inertia reel descent devices at the entry door to assist the evacuation of occupants. Emergency lighting does exist which illuminates the door sill and illuminates the ground out and slightly away from the airplane. With the present lighting, the amount of light directly under the door is less than the value stated in § 25.812. The 767-300F emergency lighting system will provide the same level of safety as that deemed acceptable by the FAA for the previously certified 757-200PF airplane.

A grant of temporary exemption would be in the public interest. It would allow certification and deliveries of 767-300F airplanes to proceed. The addition of these airplanes to the operating cargo and parcel fleet will provide for additional timely commerce in cargo and parcels as a benefit to the United States economy.

The overall time frame and number of aircraft is small. By July 1, 1996, fewer than ten 767-300F airplanes are expected to be delivered. The production changes to future delivered aircraft, combined with the retrofit program, will ensure full compliance. Considering the relatively few number of airplanes affected due to the initial delivery schedule, combined with the extremely remote circumstances of a night evacuation of the airplane, the overall risk to occupant safety is deemed acceptable.

To achieve full compliance with § 25.812 will require a significant amount of time. Boeing will need to work with the FAA to fully understand the illumination requirements with the use of inertia reel descent devices. When those requirements are agreed upon, Boeing will need to design an additional emergency lighting system which would include electrical power and wiring, lamps and structural support, and may possibly include some penetration of fuselage and/or wing structure. The illumination requirement may require design of a new light assembly if a suitable lamp is not currently available in the industry. The design would need to be committed to and installed on a production airplane. Then testing and demonstration would be performed

and documentation transmitted to the FAA to show compliance with the agreed upon requirements. Such a program will require at least nine months to complete, and it is for this reason that our request for temporary exemption extend until July 1, 1996, for production incorporation. After certification of the production installation, the preparation of a retrofit kit design, service bulletin, and hardware kits will require an additional six months. Thus, retrofit kits will first become available to operators on December 31, 1996.

This exemption will not set a precedent since it is not a complete exemption from the regulations, and will only allow sufficient time for Boeing to develop agreement with the FAA on the actual method of compliance.

The petitioner requests that this petition for temporary exemption not be delayed by the public process, which includes publication of the subject petition, due to the impending scheduled deliveries of the 767-300F airplanes. Any delay in granting this temporary exemption will be very detrimental to the petitioner.

Any delay in certification and deliveries of the 767-300F and its introduction into revenue service would cause severe economic penalties to the manufacturer and operator. The manufacturer has invested a substantial amount of capital in the development and construction of these airplanes. The operator is planning immediate use of these aircraft which are scheduled to be delivered just in time for their peak business season. If this temporary grant of exemption is not approved, the Type Certificate cannot be awarded to Boeing for the 767-300F. Certification and delivery of these 767-300F airplanes cannot proceed until such time as this issue is resolved by grant of this temporary exemption.

This petition for a temporary exemption is submitted at a time very close to the upcoming certification and delivery of the 767-300F airplane. It has only recently been revealed to the manufacturer that he has misunderstood the lighting requirements associated with the installation of inertia reel descent devices in lieu of escape slides.

Boeing commits its utmost efforts to work with the FAA to develop and implement a suitable means of compliance. We request that the FAA find our request to be valid and grant a temporary exemption,

The FAA finds, for good cause, that action on this petition should not be delayed by publication and comment procedures, in order to avoid certain detrimental effects which would otherwise be incurred by the petitioner and its customers by such a delay. The illumination requirement from which the petitioner seeks temporary exemption was not identified as a requirement until initial deliveries were imminent. For the 767-300F, the petitioner had expected to comply with the identical requirements imposed on the predecessor airplane model, the 757-200PF. It has only been recently brought to our attention that, through administrative oversight, the subject illumination capability was not included on the similarly configured 757-200PF. That omission is being addressed by separate action. In any event, irrespective of this background, the lack of this illumination capability on the 757-200PF without a

known adverse service history to date represents a precedent which, for this purpose only, further justifies not delaying action on this petition.

The FAA's analysis/summary is as follows:

The FAA does not concur with most of the petitioner's argument in favor of granting this petition. First, the petitioner is incorrect in stating that certification and delivery of the 767-300F airplane is contingent upon a grant of this petition. The FAA's position on this matter, and as conveyed to the petitioner prior to submittal of this petition, is that the subject illumination means is only required for the carriage of supernumeraries, as allowed by Exemption No. 5993A. Operations with flight crew only do not require this illumination. Thus, certification and delivery of this airplane may proceed without the requested response to this petition. Second, as discussed in the FAA finding paragraph immediately above, the FAA emphatically does not "deem as acceptable" the lack of similar illumination on the 757-200PF. The FAA considers it inappropriate to argue that a level of safety offered by a non-compliant configuration is an acceptable basis for favorably considering this petition. And third, the petitioner responds to the requirement of § 11.25(b)(5) to provide a reason why the petitioned action would not adversely affect safety, by pointing out only that a small number of supernumeraries may be impacted (no paying public), and they are briefed. The petition fails to address--other than asserting that it would be an extremely remote circumstance-- how an evacuation into darkness, into possibly hazardous materials or conditions, would not adversely affect the safety of the occupants involved, and fails to explain how the supernumeraries' briefing could overcome this shortcoming of design.

Notwithstanding the deficiencies discussed above, sufficient merit does exist to extend some relief. The FAA believes that this relief is warranted, but with certain conditions intended to ameliorate any adverse effect of this relief.

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest and will not significantly affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in §§ 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), Boeing Commercial Airplane Group is hereby granted an exemption from § 25.812(g)(1), Amendment 25-32, of the Federal Aviation Regulations. The petition is granted, in conjunction with Exemption No. 5993A, to the extent required to permit the carriage of persons other than flight crewmembers on the Boeing model 767-300F freighter airplane, with the following conditions:

1. This exemption expires on December 31, 1996. No carriage of supernumeraries is permitted on 767-300F airplanes after that date, unless compliance has been shown with the requirements of § 25.812(g)(1), as amended by Amendment 25-32.

2. The training and pre-flight briefings given to supernumeraries in accordance with the conditions of Exemption No. 5993, on 767-300F airplanes not compliant with the requirements of § 25.812(g)(1), as amended by Amendment 25-32, shall address the contingency of night evacuation.

Issued in Renton, Washington, on October 12, 1995.

Darrell M. Pederson
Acting Manager
Transport Airplane Directorate
Aircraft Certification Service, ANM-100